ABSTRACT OF THE DISCLOSURE

A novel polysiloxane suitable as a resin component of a chemically-amplified resist exhibiting particularly excellent I-D bias, depth of focus (DOF), and the like, a novel silane compound useful as a raw material for synthesizing the polysiloxane, and a radiation-sensitive resin composition comprising the polysiloxane are provided.

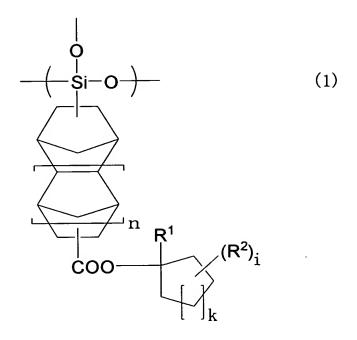
The silane compound is shown by the following formula (I),

$$\begin{array}{c} \text{OR} \\ \text{RO-Si-OR} \end{array} \tag{I}$$

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and the polysiloxane has a structural unit shown by the following formula (1),



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wherein R is an alkyl group, R^1 and R^2 individually represent a fluorine atom, lower alkyl group, or lower fluoroalkyl group, n is 0 or 1, k is 1 or 2, and i is an integer of 0 to 10.

The radiation-sensitive resin composition comprises the polysiloxane and a photoacid generator.